

Soldiers *Online*



Aquatic



Divers with the Aberdeen Test Center support a range of tests, including the survivability and lethality tests conducted on the Navy minesweeper U.S.S. *Osprey* in the ATC underwater explosion facility.

Soldiers

Story by Mike Cast

The UNDEX is a 150-foot-deep body of water also known as the "Superpond," where the Army carries out explosive testing, including shock testing on submarine and ship components.



SCUBA divers at the Aberdeen Test Center in Maryland get a real blast out of diving. They also shoot documentary film footage, provide divers for underwater operations and military tests, and add a margin of safety for equipment trials that take place in or over the water.

The team includes members from various test center organizations on Aberdeen Proving Ground, including engineers who direct tests of military weapons and equipment, technicians who perform underwater welding and construction, underwater explosives specialists, photographers and divers who support underwater work.

"It's a very diverse group of people, but they all have the same goal — to do military testing under water, or basically do any underwater work that's required," said Bill Mullis, the test center engineer who oversees training and leads underwater tasks.

Among other missions, the team has assisted with amphibious-vehicle training at places such as Fort Knox, Ky., where divers stood by in case someone got trapped in a vehicle, Mullis said.

Team members help with tests of naval hardware at the test center's underwater explosion test facility, map submerged vegetation in the Chesapeake Bay on behalf of APG's environmental office and assist the development of a ship-to-shore causeway system in Norfolk, Va.

"The causeway system consists of bridge-like pieces connected together to offload military equipment," said Mullis. "We provide SCUBA-certified

divers for operating them, and for driving equipment on and off.

"Every diver we send down there to operate equipment is SCUBA certified, because of the danger of being over open water. Given that drivers can be trapped in vehicles if they sink, we want SCUBA-certified personnel operating the equipment."

All team members must be certified as at least the equivalent of the rescue-diver rating offered by recreational SCUBA organizations, Mullis said. They receive periodic underwater training on and off post and are trained to use mixed-gas and nitrogen/oxygen breathing equipment.

All are certified as first-aid medics, one diver is trained to perform neurological medical exams in the field and more than half of the divers are certified to operate the onsite decompression chamber at ATC's underwater explosion facility.

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Rick Winiarczyk, a member of the Aberdeen Test Center diving team, surveys submerged vegetation in Chesapeake Bay.

Glen Hurd

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Mike McEvoy monitors a decompression chamber that divers can use after emerging from ATC's 150-foot deep underwater explosion facility.

nents. ATC also operates a smaller, 55-foot-deep test pond.

When the UNDEX facility was about to begin operations, diving-team members traveled to Orlando, Fla., to test an explosives deployment system in a 240-foot-deep grotto filled with spring water. Mark Stern, an ATC technical photographer who led the divers doing underwater photography and videography, recalled the problems encountered in making the system work accurately.

"One of the things we had to do was find a way to deploy a charge to different depths," Stern said. "The idea

was to use a gas-filled balloon to lower it, and then if we had to retrieve it because we had a misfire or something, inflate the balloon to make it come up. They were doing this to depths of about 120 feet, and we had several guys in place to videotape the thing.

"One of the times they inflated the



Glen Hurd

Mike Waldon, another member of the ATC dive team, makes a note after measuring the growth of underwater plants in Chesapeake Bay.

balloon, it went off course, hit one of the underwater platforms and took it out," Stern said. "This is the kind of thing that can happen when you're doing research-and-development work, so you always have to be alert and aware of your surroundings. We're doing work that we have to remember is sometimes dangerous."

Mullis said a memorable experience was diving to support the test of a Bradley armored vehicle in the Susquehanna River in Maryland.

"Swimming the Bradley below the Conowingo Dam in a 4-mile-per-hour current was interesting," he said. "We had to make a couple of practice rescue dives down to 20 feet in that current. If you've ever climbed a rope in gym class, that's basically what it felt like going to the bottom of the river, because the current was so stiff.

"We had to wrap our legs around a



An underwater explosion sends a huge geyser of water skyward during shock tests of naval equipment at the ATC's underwater explosion facility.

rope and pull ourselves down, and if we turned our faces to one side or the other, the current was so fast it would take the mask off our heads," Mullis said.

The divers also volunteer whenever the fire or sheriff's departments need assistance.

The team has been asked to help with searches on three occasions, and twice found drowning victims. In one case, the team found the body of a man who'd struck his head after falling from a river bridge. On another occasion, they found the body of a missing boy.

The team's methodical search patterns also helped others find the body of a Havre de Grace firefighter who had drowned while searching for an anchor that had come loose from his boat, Mullis said.

"We use intricate search patterns in dark water to find things," he said. "In some areas of the river and Chesapeake Bay, the 'lights' go out at about 10 feet. Picture the darkest room you've ever been in; it is probably not as dark as some of the water we dive in."

Both Mullis and Stern emphasized the more enjoyable aspects of diving for the Army, including the opportunity to take part in a variety of test projects at unusual locations.

"If there is a common theme among divers and ATC testers, it is that ATC is not limited to one type of test," Stern said. "We test big guns, missiles, wheeled vehicles, tracked vehicles — a really wide variety of testing. That is something unique." □